



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/773,048 | 02/06/2004 | Jao-Ching Lin | | 5463 |
| Ann Tsai PMB 174 Suite 137 931 West 75th Street Naperville, IL 60565 | | | | |
| | | | EXAMINER MAYEKAR, KISHOR | |
| | | | ART UNIT 1795 | PAPER NUMBER |
| | | | MAIL DATE 11/29/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/773,048 | Applicant(s) LIN ET AL. | |
| | Examiner Kishor Mayekar | Art Unit 1795 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed USB plug must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 2 is objected to because of the following informalities: the recitation "an light source" is incorrect. Should it be --a light source--? Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the abbreviated recitation "IA" without an explanation as to what it stands for is indefinite. The recitations "the air flow", "said ultraviolet lamp", "the gas" and "the processed gas" lack antecedent basis.

In claim 2, the same is applied to claim 1.

In claim 4, the recitation "said filtering units" lacks antecedent basis.

In claim 8, the abbreviated recitation "USB" is indefinite.

In claim 9, the same is applied to claim 8.

Claim Rejections - 35 USC § 102 and § 103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang (US 2004/0247495 A1). Huang's invention is directed to a mobile photocatalyst air cleaner. Huang discloses in Figs. 1-5 and paragraph 16 that the air cleaner comprises all the structures as claimed.

8. Claims 1, 3 and 7 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee et al. (US 2003/0095902A1). Lee's invention is directed to a photocatalytic air cleaner. Lee discloses in Figs. 2-4 that the air cleaner comprises all the structures as claimed. If there is a difference, it will be the intended use of the air cleaner. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lee's teachings because it has been held on the intended use of a device that "apparatus claims cover what a device is, not what a device does", *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ 2d 1525.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '902 as applied to claims 1, 3 and 7 above, and further in view of Sun et al. (US 6,447,731 B1). The difference between Lee and the instant claim is the provision of the recited USB plug. Sun teaches in a cleaning device that the provision of an USB plug in addition to a power plug for the powering of the cleaning device (Figs. 1 and 5). The subject matter as whole would have been within the level of ordinary skill in the art at the time the invention was made to have modified Lee's teachings as shown by Sun because the selection of any of known equivalent power plugs would have been within the level of ordinary skill in the art.

10. Claims 2, 4 and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Huang (US 6,462,947 B1). Huang's invention is directed to a device case with air purifying function. Huang discloses in Figs. 1-4 and col. 1, line 66 through col. 2, line 29 that the device case comprises all the structures as claimed.

11. Claims 2, 4 and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated Ou Yang et al. (US 6,980,434 B2). Ou Yang's invention is directed to computer fan assembly mechanism having filtering and sterilizing functions. OU Yang discloses in Figs. 1, 2 and 5-8 that the assembly mechanism comprises all the structures as claimed.


12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ou Yang '434 in view of Sun '731. Ou Yang as applied above further discloses in paragraph 2 that the assembly mechanism can be detached for separate use. The difference between Ou Yang and the instant claim is the provision of the recited USB plug. Sun teaches in a cleaning device that the provision of an USB plug in addition to a power plug for the powering of the cleaning device (Figs. 1 and 5). The subject matter as whole would have been within the level of ordinary skill in the art at the time the invention was made to have modified Ou Yang's teachings as shown by Sun because the selection of any of known equivalent power plugs would have been within the level of ordinary skill in the art.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kishor Mayekar
Primary Examiner
Art Unit 1795